Caribou-Targhee National Forest
Fisheries Program 2009 Annual Report

C-T Forest Fish Bios

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External Partners

Trout Unlimited

U.S. Bureau of Reclamation

U.S. Fish and Wildlife Service

U.S. Natural Resources Conservation Service

Bureau of Land Management

Idaho Department of Fish and Game

Idaho Department of Environmental Quality

Idaho Department of Agriculture

Non-native Trout Continue to Invade Yellowstone Cutthroat Trout Strongholds

The Caribou-Targhee Forest Fisheries Program returned to Yellowstone cutthroat trout (YCT) strongholds in tributaries of the South Fork Snake River and Palisades Reservoir and repeated their fish distribution survey performed 10 years ago, as required by their Forest Management Plans. Survey methods and transect locations were identical to the 1999 survey. While most of these streams maintained stronghold populations of YCT, the surveyors identified some concerns in McCoy, Indian, Burns, Rainey, and Palisades creeks.

Perhaps the most disturbing result of the 2009 survey was that a brook trout population was discovered in lower McCoy Creek, a major YCT stronghold tributary to Palisades Reservoir. No brook trout were detected in the entire McCoy Creek drainage in 1999. The closest established brook trout population to McCoy Creek is across the reservoir in Indian Creek (The one that flows into Palisades Reservoir).

With rainbow trout control measures being implemented in the river (mimicked freshets released from Palisades Dam and no limits on rainbow trout harvest) and 4 large South Fork tributaries (fish collection weirs), the Forest Fisheries Program was surprised to find migratory rainbow trout invading Indian Creek (The Indian Creek that flows into the South Fork Snake River downstream of Palisades Dam). No rainbow trout or hybrids were detected in Indian Creek during the 1999 survey. The large, migratory rainbow trout were detected spawning in the stream early in the field season.

A 2009 Forest Fisheries Technician displays an invading rainbow trout captured during the survey of Indian Creek.

The number of rainbow trout and rainbow/cutthroat trout hybrids increased in Burns and Palisades creeks over the last decade. Hybrid numbers have increased in lower Burns Creek downstream of the fish collection weir between 1999 and 2009. The rainbow trout and hybrid population in Palisades Creek downstream of Lower Palisades Lake has increased noticeably, despite the operation of the fish weir downstream of the Forest boundary.

The results of the Forest fish distribution surveys are crucial to inform fisheries and land managers on the Forest, helping to identify and prioritize interagency fisheries protection and restoration.

Bonneville Cutthroat Trout Passage Achieved Around Georgetown Hydro

A full-spanning hydroelectric diversion headgate had historically blocked Bonneville cutthroat trout and other aquatic organism migrations in Georgetown Creek. The passage barrier was corrected through a partnership that included the Forest Fisheries Program, U.S. Bureau of Reclamation (BOR), U.S. Fish and Wildlife Service, the Idaho Attorney General's Office (IAG), Bureau of Land Management (BLM), and the Bear River Environmental Coordinating Committee.

During the summer of 2009, the BOR Implementation Crew from Provo constructed a fish ladder around the headgate. The fish ladder will restore fish passage, but passage will only be provided seasonally to facilitate upstream migration of Bonneville cutthroat trout and help exclude upstream migration of non-native fish. A 5 cfs minimum stream flow, already included in the BLM special use permit for the diversion

New fish ladder constructed around Georgetown hydroelectric diversion headgate that spanned Georgetown Creek, historically blocking migrations.

located on BLM land, was inserted in the hydroelectric operating license through a partnership that included the IAG, Idaho Department of Fish and Game, the Forest, and the hydroelectric operators. Calibrations and adjustments to the ladder are planned for the spring of 2010.

Howard Creek Passage Project Provides More Access for YCT

More of Howard Creek was connected to Henrys Lake with the replacement of a barrier culvert with a bridge, 200 yards upstream from Highway 87. This allows for passage of Yellowstone cutthroat trout from Henrys Lake further up the stream.

The Nature Conservancy led the project, and other partners included the private landowner and Eastern Idaho Resource Advisory Committee. Two smaller culverts that are partial barriers remain upstream and are scheduled for replacement in 2010.

Pre-project Howard Creek culvert was under-sized and a barrier to upstream-migrating Yellowstone cutthroat trout.

The impassable culvert was replaced with a bridge to restore Yellowstone cutthroat trout passage.

The Removal of Georgetown Road Begins

Last summer, the Forest Fisheries Program, in partnership with Trout Unlimited and U.S. Fish and Wildlife Service, began removing Georgetown Road from the valley bottom of Georgetown Creek. The road fill occurs in the stream and its floodplains and includes waste from a phosphate smelter that was operated in the upper watershed in the 1950s and 60s. Several fish migration barriers occurred within the segment of road planned for removal. In 2008, a replacement road was constructed in the uplands and in 2009, approximately 700 feet of road were removed, restoring stream access to its floodplain, re-establishing a functioning riparian area, and exposing large springs that were covered by the old road. The road segment removal also decreased fine sediment and contaminant runoff from the road. Native grass seed and riparian shrubs were planted in the treatment area. Contaminated road fill was removed from the valley bottom and placed in excavated areas in the uplands, covered with topsoil, and hydro-mulched with native grasses. Idaho Department of Environmental Quality assisted in the environmental monitoring of the implementation of this project. The Georgetown Road Relocation Project is a multiple year project that will improve water quality, stream channel and floodplain function and structure, and fish passage in this important Bonneville cutthroat trout tributary to the Bear River. A separate status report is available.

Aerial view of project area after removal of road segment from the floodplain and bottom of Georgetown Creek.

A segment of Georgetown Road removed from the floodplain of Georgetown Creek, exposing riparian springs previously covered by extensive road fill.

Pre-project Georgetown Road encroached upon Georgetown Creek, pushing it against the valley wall. The road fill includes phosphate smelter slag contaminants.

A Idaho Department of Environmental Quality specialist monitors air quality during the first day of excavation of road fill from Georgetown Creek floodplain.

Passage Progress at Duck Creek

Pre- (left) and post- (right) construction at Duck Creek crossing site. The impassable, under-capacity culvert was replaced by a bottomless arch with a natural stream bottom.

In 2009 the Forest Fisheries Program, in partnership with Eastern Idaho Resource Advisory Committee, U.S. Fish and Wildlife Service, and Henrys Lake Foundation, initiated the Duck Creek fish passage project, restoring upstream passage at one out of the four fish passage barriers on Duck Creek, a tributary to Henrys Lake. This project benefits Henrys Lake Yellowstone cutthroat trout. Work on the other 3 crossings is expected to occur in 2010.

Fish Passage Restored at Elk Creek

In 2009, the Caribou-Targhee National Forest replaced a crossing of Elk Creek (FS Road 058), in partnership with the Western Native Trout Initiative and U.S. Fish and Wildlife Service, the Eastern Idaho Resource Advisory Committee, and Trout Unlimited. The crossing was identified during the 2005 Forest culvert fish passage inventory as a barrier to Yellowstone cutthroat trout attempting to migrate up Elk Creek from Palisades Reservoir. It was replaced with a bridge that has appropriate flow capacity, width, and gradient, restoring access to more than 5 miles of quality habitat.

Pre- (left) and post- (right) construction at Elk Creek crossing site, upstream of the Elk Creek/Bear Creek confluence. The impassable, under-capacity culvert was replaced with a bridge.

Aquatic Organism Passage Achieved at Wolverine Creek

Pre- (left) and post- (right) construction at Wolverine Creek crossing site at the South Fork River Road. The impassable, damaged culverts were replaced with a concrete component bridge.

November 2008, the Caribou-Targhee National Forest Fisheries Program worked in partnership with the Eastern Idaho Resource Advisory Committee, U.S. Fish and Wildlife Service, and Trout Unlimited to restore aquatic organism passage at Wolverine Creek, at the South Fork Snake River Road (FS Road 206). Wolverine Creek is a tributary to the South Fork Snake River with a resident population of Yellowstone cutthroat trout. The under-capacity, damaged culverts were replaced with a concrete component bridge.

Hydro and Fish Team Restores Segment of Crow Creek

In 2009, personnel from the Forest Hydrology and Fisheries shops restored one mile of channelized Crow Creek, a tributary to Salt River. Meanders were restored to the channelized stream reach and native vegetation was planted. Crow Creek is an important corridor for migratory Yellowstone cutthroat trout from Salt River and Palisades Reservoir to upper Crow Creek and its tributaries and is an important fisheries for Yellowstone cutthroat trout and brown trout. Partners in the project included Natural Resources Conservation Service, Eastern Idaho Resource Advisory Committee, U.S. Fish and Wildlife Service, and Trout Unlimited.

Streambank soil bioengineering technical training students tour a restored segment of Crow Creek in October 2009. Corey Lyman helped organize the Natural Resources Conservation Service training.

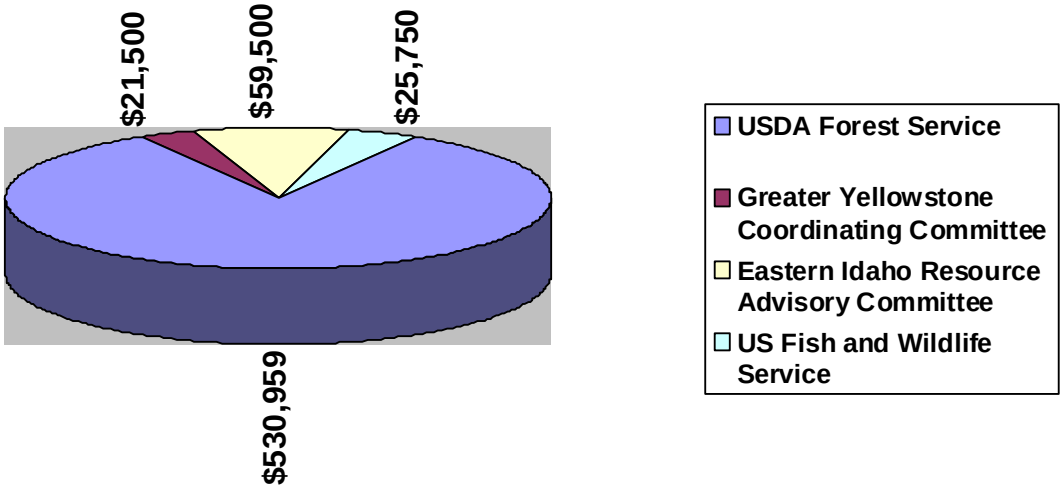
The Forest, with Greater Yellowstone Area Partners, Take Actions Against Aquatic Invasive Species

The Forest Fisheries Program is working in partnership through the Greater Yellowstone Area (GYA) Aquatic Invasive Species (AIS) Cooperative to prevent and control AIS on the Forest and throughout the GYA. The GYA AIS Cooperative consists of federal, state, and county agencies, organizations, outfitters, and businesses and is a subcommittee of the Greater Yellowstone Coordinating Committee (GYCC). The group pools resources, knowledge, and energy and avoids the duplication of efforts.

With the assistance of the GYCC, the GYA AIS Cooperative made significant strides against AIS in 2009. These actions included preparing strategic and implementation plans, developing an inventory/monitoring framework, publishing a GYA AIS brochure, organizing universal outreach and inventory crew training sessions, deploying public outreach crews throughout the GYA, performing inventory/monitoring surveys, creating a marketing strategy, and developing a website (http://www.cleaninspectdry.com/).

AIS interpretive poster developed by the Forest, BLM, ID Dept. of Agriculture, and ID Dept. of Environmental Quality.

2009 Caribou-Targhee Forest Fisheries Program Funding



Non-Native Fish Invasions...Who Cares? You Should.

Anyone who cares about stream, river, and lake ecosystems should be aware of the invasive fish species issue and the interagency efforts to combat it. While rainbow trout can interbreed with native cutthroat trout, affecting the genetic integrity of the population, brook and brown trout can out-compete and prey upon native fish populations. Native fish have been selected for, through thousands of years of evolution, and are adapted for long term resiliency in our waters. Non-native fish are "Johnny come latelys" that do not have a proven track record for long term population resiliency. In addition, other components of the aquatic ecosystem rely upon native fish and their replacement with non-native species may not function as well in the ecosystem. Economic studies in the Snake River by Colorado State University indicate anglers prefer native cutthroat trout and they have a significant value to regional and local economies. In contrast, the economic cost for managing against non-native fish invasions can be staggering. As an example, Yellowstone National Park spends $300,000 per year to battle the illegally introduced lake trout population in Yellowstone Lake. Also, federal listing of native cutthroat trout under the Endangered Species Act due to population declines may have far-reaching consequences. Anglers can assist in the conservation of native fish by harvesting rainbow and hybrid trout caught on the South Fork Snake River and by discouraging and reporting private individuals that illegally transport live fish between streams. We encourage your support of future interagency invasive fish species control measures.

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